PEST RISK ANALYSIS

STAGE 1: INITIATION **Identify pest**		
This section examines the identity of the pest to ensure that the assessment is being performed on a real identifiable organism and that biological and other information used in the assessment is relevant to the organism in question.		
1. Is the organism clearly a single taxonomic entity and can it be adequately distinguished from other entities of the same rank ? *if yes go to 3 if no go to 2*	Yes	*Limonius californicus* (Mannerheim) Coleoptera : Elateridae
2. Attempt to redefine the taxonomic entity so that the criteria under 1 are satisfied. Is this possible ? *if yes go to 3* *if no go to 22*	-	
The PRA Area		
The PRA area can be a complete country, several countries or part(s) of one or several countries.		
3. Clearly define the PRA area.		Entire EPPO region
	Go to 4.	
Earlier analysis		
The pest, or a very similar pest, may have been subjected to the PRA process before, nationally or internationally. This may partly or entirely replace the need for a new PRA.		
4. Does a relevant earlier PRA exist ? *if yes go to 5* *if no go to 7*	Yes	The UK has previously considered wireworms during a commodity risk assessment of seed potatoes from the eastern seaboard of Canada (Baker, 1995).

5. Is the earlier PRA still entirely valid, or only partly valid (out of date, applied in different circumstances, for a similar but distinct pest) ? *if entirely valid End* *if partly valid go to 6 if not valid go to 7*	Partly valid	The earlier assessment considered eight species but did not include *Limonius californicus.*
6. Proceed with the assessment, but compare as much as possible with the earlier assessment.	*Go to 7.*	A copy of the earlier assessment is attached.
STAGE 2. PEST RISK ASSESSMENT **Section A: Qualitative criteria of a quarantine pest** **Geographical criteria**		
This section considers the geographical distribution of the pest in the PRA area.		
7. Does the pest occur in the PRA area ? *if yes go to 8* *if no go to 9*	No	*Limonius californicus* is restricted to North America (USA & Canada)
8. Is the pest of limited distribution in the PRA area ? *Note: "of limited distribution" means that the pest has not reached the limits of its potential range either in the field or in protected conditions : it is not limited to its present distribution by climatic conditions or host-plant distribution. There should be evidence that, without phytosanitary measures, the pest would be capable of additional spread.* *if yes go to 18 if no go to 22*	No	

Potential for establishment		
For the pest to establish, it must find a widely distributed host plant in the PRA area (do not consider plants which are accidentally / very occasional hosts or recorded only under experimental conditions). If it requires a vector, a suitable species must be present or its native vector must be introduced. The pest must also find environmental conditions suitable for survival, multiplication and spread, either in the field or in protected conditions.		
9. Does at least one host plant grow to a substantial extent in the PRA area, in the open, in protected cultivation or both ? *if yes go to 10 if no go to 22*	Yes	Hosts such as potatoes, cereals and sugar beet are very widely grown in the EPPO region.
10. Does the pest have to pass part of its life cycle on a host plant other than its major host (*i.e.* obligate alternate host plant) ? *if yes go to 11 if no go to 12*	No	
11. Does the alternate host plant occur in the same part of the PRA area as the major host plant ? *if yes go to 12 if no go to 22*	-	
12. Does the pest require a vector (*i.e.* is vector transmission the only means of dispersal) ? *if yes go to 13 if no go to 14*	No	
13. Is the vector present in the PRA area likely to be introduced. If in doubt, a separate assessment of the probability of introduction of the vector (in Section B1) may be needed ? *if yes go to 14 if no go to 22*	-	

14. Does the known geographical distribution of the pest include eco-climatic zones comparable with those of the PRA area ? *if yes go to 18 if no go to 15*	Yes	The EPPO region contains eco-climatic zones similar to those in the Pacific north west of North America where *L. californicus* is most common.
15. Is it probable, nevertheless, that the pest could survive and thrive in a wider eco-climatic zone that could include the PRA area ? *if yes go to 18 if no go to 16*	-	
16. Could the eco-climatic requirements of the pest be found in protected conditions in the PRA area ? *if yes go to 17 if no go to 22*	-	
17. Is a host plant grown in protected conditions in the PRA area ? *if yes go to 18 if no go to 22*	-	

Potential economic importance		
18. With specific reference to the host plant(s) which occur(s) in the PRA area, and the parts of those plants which are damaged, does the pest in its present range cause significant damage or loss ? *if yes go to 21 if no go to 19*	Yes	*L. californicus* is one of six economically important species within the Genus *Limonius*. It is an important pest of irrigated crops, potatoes, sugar beet and small grains (Hill, 1987; McCaffrey *et al*., 1995).

19. Could the pest, nevertheless, cause significant damage or loss in the PRA area, considering eco-climatic and other factors for damage expression ? *if yes go to 21 if no go to 20*	-	
20. Would the presence of the pest cause other negative economic impacts (social, environmental, loss of export markets) ? *if yes go to 21 if no go to 22*	-	
21. This pest could present a risk to the PRA area **Go To Section B**		
22. This pest does not qualify as a quarantine pest and the assessment can stop.		
However if this is the first time that the decision-making scheme has directed you to this point, it may be worth returning to the question that led you here and continuing through the scheme in case the remaining questions strongly indicate categorisation as a possible quarantine pest. In the latter case, seek a second opinion to decide whether the answers which led you to this point could be given a different reply.		

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